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WHAT IS CLAIMED IS:

1 1. An article of manufacture including program logic for performing
2 configuration checking of a network, wherein the program logic causes operations to be
3 performed, the operations comprising:
4 scanning a network data store for at least one transaction;
5 generating at least one event for said transaction;
6 associating at least one configuration policy with said event;
7 comparing said configuration policy with configuration data associated with said
8 event; and
9 determining whether said configuration policy has been violated based on the
10 comparison.

1 2. The article of manufacture of claim 1, wherein the operations further
2 comprise:
3 generating at least one trigger for said event; and
4 associating said configuration policy with said trigger.

1 3. The article of manufacture of claim 1, wherein said configuration policy is
2 retrieved from a local policy data store.

1 4. The article of manufacture of claim 3, wherein said configuration policy in
2 the local policy data store is automatically updated with a configuration policy in a
3 remote data store.

1 5. The article of manufacture of claim 1, wherein the operations further
2 comprise:
3 receiving a hypothetical network scenario;
4 generating at least one transaction based on the hypothetical network scenario;
5 populating the network data store with configuration data for said transaction; and
6 after determining whether said configuration policy has been violated based on
7 the comparison, rolling back said transaction.

1 6. The article of manufacture of claim 1, wherein the operations further
2 comprise:
3 receiving a request to perform configuration checking on an existing network
4 configuration.

1 7. The article of manufacture of claim 1, wherein the operations further
2 comprise:
3 when said configuration policy has been violated, performing an action specified
4 in that configuration policy.

1 8. The article of manufacture of claim 7, wherein the action is at least one of
2 logging an indication that the configuration policy has been generated, generating at least
3 one policy violation event, sending a notification, and highlighting a network topology
4 viewer that graphically depicts the network.

1 9. The article of manufacture of claim 1, wherein the operations further
2 comprise:
3 when said configuration policy has been violated,

4 accessing a solution in a knowledge data store; and
5 applying the solution so that said configuration policy is not violated.

1 10. The article of manufacture of claim 1, wherein the operations further
2 comprise:
3 when said configuration policy has been violated,
4 determining that a component in the network is able to provide a solution;
5 and
6 allowing the component to apply the solution so that said configuration
7 policy is not violated.

1 11. The article of manufacture of claim 1, wherein the operations for
2 determining whether said configuration policy has been violated further comprise at least
3 one of identifying incompatibilities between components in the network, performance
4 issues, and availability issues.

1 12. An article of manufacture including program logic for performing
2 proactive configuration checking of a network, wherein the program logic causes
3 operations to be performed, the operations comprising:
4 receiving a hypothetical network scenario;
5 generating at least one transaction based on said hypothetical network scenario;
6 populating a network data store with configuration data for said transaction;
7 generating at least one event for said transaction using a mapping of events to
8 transactions; and
9 using configuration data associated with said event to determine whether a
10 configuration policy has been violated.

1 13. The article of manufacture of claim 12, wherein the operations further
2 comprise:
3 rolling back said transaction by removing the configuration data for said
4 transaction from the network data store.

1 14. An article of manufacture including program logic for performing reactive
2 configuration checking of a network, wherein the program logic causes operations to be
3 performed, the operations comprising:
4 receiving a request to perform configuration checking on an existing network
5 configuration;
6 scanning a network data store for at least one transaction;
7 generating at least one event for said transaction using a mapping of events to
8 transactions; and
9 using configuration data associated with said event to determine whether a
10 configuration policy has been violated.

1 15. The article of manufacture of claim 14, wherein the operations further
2 comprise:
3 when said configuration policy has been violated, automatically correcting the
4 violation.

1 16. An article of manufacture including program logic for correcting a
2 configuration problem, wherein the program logic causes operations to be performed, the
3 operations comprising:
4 discovering the configuration problem;

5 determining whether there is at least one solution for the configuration problem in
6 a knowledge data store;
7 when it is determined that there is at least one solution in the knowledge data
8 store, automatically selecting a solution to solve the configuration problem;
9 when said solution can be automatically applied, automatically applying said
10 solution; and
11 when said solution cannot be automatically applied, notifying a user.

1 17. The article of manufacture of claim 16, wherein operations for detecting
2 the configuration problem further comprise:
3 periodically interrogating said component in the network for data; and
4 determining whether there is a configuration problem based on the interrogation.

1 18. The article of manufacture of claim 16, wherein operations for detecting
2 the configuration problem further comprise:
3 receiving at least one report from at least one component in the network; and
4 determining whether there is a configuration problem based on the report.

1 19. The article of manufacture of claim 16, wherein the operations further
2 comprise:
3 when a component in the network identifies a solution, allowing the component to
4 automatically apply the solution.

1 20. The article of manufacture of claim 16, wherein the configuration problem
2 is at least one of a network configuration problem and a storage configuration problem.

1 21. A system for performing configuration checking of a network, comprising:
2 a processor;
3 a computer readable medium accessible to the processor; and
4 program logic including code capable of causing the processor to perform:
5 scanning a network data store for at least one transaction;
6 generating at least one event for said transaction;
7 associating at least one configuration policy with said event;
8 comparing the said configuration policy with configuration data associated
9 with said event; and
10 determining whether said configuration policy has been violated based on
11 the comparison.

1 22. The system of claim 21, wherein the code is capable of causing the
2 processor to further perform:
3 generating at least one trigger for said event; and
4 associating said configuration policy with said trigger.

1 23. The system of claim 21, wherein said configuration policy is retrieved
2 from a local policy data store.

1 24. The system of claim 23, wherein said configuration policy in the local
2 policy data store is automatically updated with a configuration policy in a remote data
3 store.

1 25. The system of claim 21, wherein the code is capable of causing the
2 processor to further perform:

3 receiving a hypothetical network scenario;
4 generating at least one transaction based on the hypothetical network scenario;
5 populating the network data store with configuration data for said transaction; and
6 after determining whether said configuration policy has been violated based on
7 the comparison, rolling back said transaction.

1 26. The system of claim 21, wherein the code is capable of causing the
2 processor to further perform:
3 receiving a request to perform configuration checking on an existing network
4 configuration.

1 27. The system of claim 21, wherein the code is capable of causing the
2 processor to further perform:
3 when said configuration policy has been violated, performing an action specified
4 in that configuration policy.

1 28. The system of claim 27, wherein the action is at least one of logging an
2 indication that the configuration policy has been generated, generating at least one policy
3 violation event, sending a notification, and highlighting a network topology viewer that
4 graphically depicts the network.

1 29. The system of claim 21, wherein the code is capable of causing the
2 processor to further perform:
3 when said configuration policy has been violated,
4 accessing a solution in a knowledge data store; and
5 applying the solution so that said configuration policy is not violated.

1 30. The system of claim 21, wherein the code is capable of causing the
2 processor to further perform:
3 when said configuration policy has been violated,
4 determining that a component in the network is able to provide a solution;
5 and
6 allowing the component to apply the solution so that said configuration
7 policy is not violated.

1 31. The system of claim 21, wherein the code for determining whether said
2 configuration policy has been violated is capable of causing the processor to further
3 perform at least one of identifying incompatibilities between components in the network,
4 performance issues, and availability issues.

1 32. A system for performing proactive configuration checking of a network,
2 comprising:
3 a processor;
4 a computer readable medium accessible to the processor; and
5 program logic including code capable of causing the processor to perform:
6 receiving a hypothetical network scenario;
7 generating at least one transaction based on said hypothetical network
8 scenario;
9 populating a network data store with configuration data for said
10 transaction;
11 generating at least one event for said transaction using a mapping of
12 events to transactions; and

13 using configuration data associated with said event to determine whether a
14 configuration policy has been violated.

1 33. The system of claim 32, wherein the code is capable of causing the
2 processor to further perform:
3 rolling back said transaction by removing the configuration data for said
4 transaction from the network data store.

1 34. A system for performing reactive configuration checking of a network,
2 comprising:
3 a processor;
4 a computer readable medium accessible to the processor; and
5 program logic including code capable of causing the processor to perform:
6 receiving a request to perform configuration checking on an existing
7 network configuration;
8 scanning a network data store for at least one transaction;
9 generating at least one event for said transaction using a mapping of
10 events to transactions; and
11 using configuration data associated with said event to determine whether a
12 configuration policy has been violated.

1 35. The system of claim 34, wherein the code is capable of causing the
2 processor to further perform:
3 when said configuration policy has been violated, automatically correcting the
4 violation.

1 36. A system for correcting a configuration problem, comprising:
2 a processor;
3 a computer readable medium accessible to the processor; and
4 program logic including code capable of causing the processor to perform:
5 discovering the configuration problem;
6 determining whether there is at least one solution for the configuration
7 problem in a knowledge data store;
8 when it is determined that there is at least one solution in the knowledge
9 data store, automatically selecting a solution to solve the configuration problem;
10 when said solution can be automatically applied, automatically applying
11 said solution; and
12 when said solution cannot be automatically applied, notifying a user.

1 37. The system of claim 36, wherein the code for detecting the configuration
2 problem is capable of causing the processor to further perform:
3 periodically interrogating said component in the network for data; and
4 determining whether there is a configuration problem based on the interrogation.

1 38. The system of claim 36, wherein the code for detecting the configuration
2 problem is capable of causing the processor to further perform:
3 receiving at least one report from at least one component in the network; and
4 determining whether there is a configuration problem based on the report.

1 39. The system of claim 36, wherein the code is capable of causing the
2 processor to further perform:

3 when a component in the network identifies a solution, allowing the component to
4 automatically apply the solution.

1 40. The system of claim 36, wherein the configuration problem is at least one
2 of a network configuration problem and a storage configuration problem.

1 41. A method for performing configuration checking of a network,
2 comprising:
3 scanning a network data store for at least one transaction;
4 generating at least one event for said transaction;
5 associating at least one configuration policy with said event;
6 comparing the said configuration policy with configuration data associated with
7 said event; and
8 determining whether said configuration policy has been violated based on the
9 comparison.

1 42. A method for performing proactive configuration checking of a network,
2 comprising:
3 receiving a hypothetical network scenario;
4 generating at least one transaction based on said hypothetical network scenario;
5 populating a network data store with configuration data for said transaction;
6 generating at least one event for said transaction using a mapping of events to
7 transactions; and
8 using configuration data associated with said event to determine whether a
9 configuration policy has been violated.

1 43. A method for performing reactive configuration checking of a network,
2 comprising:
3 receiving a request to perform configuration checking on an existing network
4 configuration;
5 scanning a network data store for at least one transaction;
6 generating at least one event for said transaction using a mapping of events to
7 transactions; and
8 using configuration data associated with said event to determine whether a
9 configuration policy has been violated.

1 44. A method for correcting a configuration problem, comprising:
2 discovering the configuration problem;
3 determining whether there is at least one solution for the configuration problem in
4 a knowledge data store;
5 when it is determined that there is at least one solution in the knowledge data
6 store, automatically selecting a solution to solve the configuration problem;
7 when said solution can be automatically applied, automatically applying said
8 solution; and
9 when said solution cannot be automatically applied, notifying a user.